



City of Santa Barbara
Fire Prevention Bureau
High Fire Hazard Area Landscape Guidelines
Ordinance #5439

To incorporate fire resistant landscaping on all parcels within the High Fire Hazard area the following landscape guidelines must be utilized. The guidelines meet the requirements for the Fire Department “Defensible Space Requirements”, per Chapter 47 of the California Fire Code, 2007 Edition, as adopted by City Ordinance #5439. These standards apply to all parcels within the High Fire Hazard Area. Fire resistant landscaping with proper plant spacing and maintenance can impede the progress of a wildfire, reduce its intensity, and provide a safe buffer to protect a structure.

Incorporation of the High Fire Hazard Area Landscape Guidelines into the review process will assist the City in complying with existing regulations for vegetation modification, balance the aesthetic beauty of our area, protect our resources, and reduce the risk associated with wildfire and habitat resources.

Guidelines

Landscape plans submitted for review shall include the following:

- A vegetation plan that details existing native vegetation with species name and locations.
- Include on the vegetation plan which plants will be removed or retained.
- Include the method used to remove vegetation (exp. mechanical or hand cutting).
- Landscape plans should include new plantings with species name and specific location of plantings to scale.
- Recommendations for plant placement should be followed as outlined in Table 1.
- Landscape plans must delineate landscape zones around all structures for a distance of 100 feet in the Foothill Zone and 150 feet in the Extreme Foothill Zone as follows:
 - Zone 1 - (0-30 feet from structure)
 - Zone 2 - (30 to 50 feet from structure)
 - Zone 3 - (50 to 70 feet from the structure)
 - Zone 4 - (70 to 100 feet from the structure in the Foothill Zone or 70 to 150 feet in the Extreme Foothill Zone)

All plantings along driveways and street access areas (on or adjacent to the property) must be shown on landscape plans and are required to have vegetation planted or trimmed to provide a vertical clearance of 13 feet 6 inches and a 10 foot horizontal clearance.

All landscape plant species must be fire resistant (See enclosed Desirable Qualities for Fire Resistant Landscape Plants, Table 2). Certain plant species are considered to be undesirable in the High Fire Hazard area landscape. The enclosed list of Undesirable Plant Species (Table 3) should not be planted within 150 feet of any structure, unless listed otherwise.

Slopes over 30% are at increased risk from wildfire, therefore the Fire Department may require additional vegetation modification for a total distance of 150-300 feet from any structure.

Many homes in the High Fire Hazard area do not have the space surrounding their property to obtain Defensible Space Requirements. Using the above zone concept becomes critical on these properties.

Table 1: Recommendations for Plant Placement

ZONE 1 0 – 30 feet	This area is closest to a structure. It provides the best protection against the high radiant heat that result during a wildfire. Plants should be low growing, irrigated plants. Focus should be on ground covers not more than 12 inches in height or succulents. Use non-flammable materials for paths, patios, and mulch. Trees should not be planted closer than 15 feet from a structure.
ZONE 2 30 – 50 feet	Maintain a reasonably open character in this area. Plant low growing ground covers and succulents resistant to fire. Shrubs up to 3 feet can be planted but should have at least 18 feet spacing between other shrubs or other trees. Shrubs can be planted in clusters not more than 10 feet in diameter, but should have at least 18 feet between clusters. Do not plant shrubs underneath canopy of trees. Trees should be spaced at least 30 feet apart to prevent crowns from touching once fully grown.
ZONE 3 50 – 70 feet	This area should have native and Mediterranean plantings that require irrigation and should not be higher than 4 to 6 feet. Shrubs should be spaced at least 18 feet away from each other. Shrubs can be planted in clusters not more than 10 feet in diameter, but should have at least 18 feet between clusters. Trees should be spaced at least 30 feet apart to prevent crowns from touching once fully grown.
ZONE4 70 – 150 feet	This zone is furthest from the structure. Plantings once established need no irrigation. There is no limit to height. Shrubs planted in this area should have 18 feet spacing or be planted in clusters with at least 18 feet spacing. Trees can be planted in groups or with individual spacing at least 30 feet from other trees.
SLOPES>30%	If additional vegetation modification is required on slopes over 30% vegetation should be reduced through thinning of existing plants, pruning, removal of dead material, and removal of fire ladders (Fire ladders exist if a fire's flames can spread from the ground into shrubs and trees up to a house).

TABLE 2 - Desirable Qualities for Fire Resistant Landscape Plants

Plant qualities that are desirable for fire resistant plants are:

- Ability to store water in leaves or stems.
- Produces limited dead and fine material.
- Extensive root systems for controlling erosion.
- Plant has high levels of salt or other non-resinous compounds within its tissues that can contribute to fire resistance.
- Ability to withstand drought.
- Plants that are low growing in form.
- Ability to withstand severe pruning.
- Low levels of volatile oils or resins.
- Ability to resprout after a fire.

Table 3: Undesirable Plant List

Certain plants are considered to be undesirable in the landscape due to characteristics that make them highly flammable. These characteristics can be either physical or chemical. Physical properties would include large amounts of dead material retained within the plant, rough or peeling bark, and the production of profuse amounts of litter. Chemical properties include the presence of volatile substances such as oils, resins, wax, and pitch. Certain native plants are notorious as species containing these volatile substances.

Plants with these characteristics should not be planted in High Fire Hazard areas. They are referred to as target species since their partial or complete removal is a critical part of hazard reduction. The following is a list of plants that should be avoided within the landscape zones defined in Table 1.

Undesirable Plant Species

Natives	Domestics
<i>Adenostoma fasciculatum</i> – Chamise	<i>Acacia</i> species
<i>Adenostoma sparsifolium</i> – Red Shank	<i>Casuarina</i> species - Beefwood
<i>Artemisia californica</i> – California Sagebrush	<i>Cortaderia</i> species – Pampas Grass
<i>Baccharis</i> species (low growing form OK)	<i>Cupressus</i> species – Cypress
<i>Eriogonum fasciculatum</i> – Common Buckwheat	<i>Eucalyptus</i> species – Eucalyptus
<i>Olneya tesota</i> - Iron wood	<i>Juniperous</i> species – Juniper (except species which grow less than 1 foot)
	<i>Melaleuca</i> species
	<i>Pennisetum</i> - Fountain Grass
	<i>Pinus</i> species – Pine
	<i>Schinus molle</i> – California pepper tree (within 50 feet of structure)

Other plants may be considered undesirable because of their ability to naturalize and become a pest. These types of plants should be avoided, especially in sensitive riparian or coastal areas where they could become established and compete with native vegetation.

On steep slopes care should be taken to avoid erosion problems created or enhanced by vegetation removal. Deep rooted ground covers and landscape plants should be utilized to hold soil in place. Avoid shallow rooted ground covers. For example, iceplant while an effective ground cover on flat surfaces would be undesirable on a steep slope because its shallow rooted nature may increase erosion when the root zone becomes saturated during heavy rains, exposing bare soil. In areas where target species compromise the total vegetation, partial removal is recommended to obtain Fire Department “Defensible Space Requirements”.